



## CEM II/A-L 42.5N Premium Grade Cement (Bagged)

A Portland-limestone cement product manufactured in accordance with, and certified to BS EN 197-1: 2011. This product complies with the requirements for CE marking (Certificate of Conformity No. 0050 - CPR - 1153) and operates a Factory Production Control system to attestation level 1+. This product conforms to the European Directive 2003/53/EC which stipulates that a cement may not be placed on the market if it contains more than 2ppm soluble Chromium VI. Ferrous Sulphate is used to control the level of Chromium VI.

This product is marketed as CEM II /A-L 42.5N.



### Physical Properties

Property	Requirement	Range
Surface Area (m <sup>2</sup> /Kg)	-	360 - 430
Apparent Particle Density (Kg/m <sup>3</sup> )	-	3100 - 3250
Initial Setting Time (mins)	≥ 60 mins	160 - 200
Soundness (mm)	≤ 10 mm	0 - 2.0

#### Compressive Strength N/mm<sup>2</sup>

2 day	≥10	16.0 - 24.0
7 day		28.0 - 34.0
28 day	≥42.5 ≤62.5	44.0 - 50.0

### Chemical Properties

Element (oxide of)	Symbol	Unit	Requirement	Range
Silica	SiO <sub>2</sub>	%		16.0 - 20.0
Alumina	Al <sub>2</sub> O <sub>3</sub>	%		4.0 - 6.0
Iron	Fe <sub>2</sub> O <sub>3</sub>	%		2.0 - 3.0
Calcium	CaO	%		60.0 - 66.0
Magnesium	MgO	%		1.0 - 3.0
Sulphur	SO <sub>3</sub>	%	< 3.5	2.65 - 2.85

#### Other chemical properties

Loss on Ignition (%)		%		5 - 10
Insoluble Residue (%)		%		<5.0
Alkali's	Na <sub>2</sub> eq	%		0.45 - 0.65